UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

May 4, 2015

Smita Deshpande
Caltrans-District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-1692

Subject: Final Environmental Impact Statement for the San Diego Freeway (Interstate 405) Improvement Project between State Route 73 and Interstate 605 in Orange County, California (CEQ #20150091)

Dear Ms. Deshpande:

The U.S. Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the Interstate 405 (I-405) Improvement Project between State Route 73 (SR-73) and Interstate 605 (I-605) in Orange County, California. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act. The State of California has assumed responsibilities under NEPA for this project pursuant to the Memorandum of Understanding between the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program.

As described in the FEIS, this project aims to relieve congestion and improve operational efficiency on I-405 between SR 73 and I-605 through a combination of additional lanes and interchange enhancements. Three alternatives for I-405 improvement are analysed. Alternatives 1 and 2 would add 1 and 2 general purpose lanes, respectively. Alternative 3 would add 1 general purpose lane and one express lane adjacent to the existing HOV lane to create a two-lane managed express HOV and toll facility. The FEIS identifies Alternative 3 as the preferred alternative.

EPA reviewed the Draft Environmental Impact Statement (DEIS) for this project, and provided comments to Caltrans on July 17, 2012. We rated the DEIS as Environmental Concerns-Insufficient Information (EC-2) due to potential air quality impacts resulting from highway expansion without implementation of stringent Transportation Demand Management measures, as with Alternatives 1 and 2. EPA commends Caltrans for pursuing a preferred alternative in the FEIS (Alternative 3) which promotes carpooling and transit patronage, and we believe that the incorporation of managed lanes on I-405 provides the best opportunity to meet long-term transportation needs while reducing emissions from single occupancy vehicles. The incorporation of Alternative 3 as the preferred alternative addresses many of the concerns

outlined in our comments on the DEIS. Our remaining concerns regarding construction air quality mitigation and climate change are provided below.

Construction Air Quality Mitigation

Caltrans should adopt a Construction Emissions Mitigation Plan for fugitive dust and diesel particulate matter (PM) in the Record of Decision (ROD). Due to the serious nature of the PM 2.5 and PM 10 conditions in the project area, best available control measures for these pollutants should be implemented at all times. In addition to those control measures listed in section 3.2.6.4 of the FEIS, and those required by South Coast Air Quality Management District, we recommend that all measures identified below be incorporated into a Construction Mitigation Plan in order to reduce impacts associated with emissions of PM and other toxics from construction-related activities.

Recommendations:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Minimize use, trips, and unnecessary idling of heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. The California Air Resources Board has a number of mobile source anti-idling requirements which should be employed (http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm).
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- In general, commit to the best available emissions control technologies for project equipment.
    - *On-Highway Vehicles* - On-highway vehicles used for this project should meet, or exceed the US EPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).[1]

[1] http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm

- *Nonroad Vehicles & Equipment* - Nonroad vehicles & equipment used for this project should meet, or exceed the US EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., construction equipment, nonroad trucks, etc.).[2]
- *Low Emission Equipment Exemptions* – The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.
- *Advanced Technology Demonstration & Deployment* – Caltrans is encouraged to demonstrate and deploy heavy-duty technologies that exceed the latest US EPA emission performance standards for the equipment categories that are relevant for this project (e.g., plug-in hybrid-electric vehicles-PHEVs, battery-electric vehicles-BEVs, fuel cell electric vehicles-FCEVs, etc.).

Administrative controls:

- Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.
- Specify the means by which Caltrans will minimize impacts to sensitive receptors, such as children, elderly, and infirm. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
- Prepare an inventory of all equipment prior to construction.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.

Climate Change

On December 18, 2014, the Council on Environmental Quality released revised draft guidance that describes how Federal agencies should consider the effects of greenhouse gas (GHG) emissions and climate change in their National Environmental Policy Act reviews. We recognize and appreciate that Caltrans has performed quantitative GHG analysis for this project and we note that the FEIS concludes that the preferred alternative would result in fewer GHG emissions than the no-build alternative. The CEQ guidance directs agencies to consider reasonable mitigation measures and alternatives as provided for under the existing regulations and develop, where feasible, mitigation measures to lower the level of GHG emissions.

Recommendations:

- Include a discussion in the ROD regarding project commitments to ensure implementation of design or other measures to reduce GHG emissions and to adapt to climate change impacts.

[2] http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm

We appreciate the opportunity to review this FEIS. When the ROD is signed, please send one copy to the address above (mail code: ENF 4-2). If you have any questions, please contact me at 415-947-4161 or Clifton Meek, the lead reviewer for this project. Clifton can be reached at 415-972-3370 or meek.clifton@epa.gov.

Sincerely,

Connell Dunning

Connell Dunning, Transportation Team Supervisor
Environmental Review Section

Cc via email: John Chisholm, Caltrans
Brenda Powell-Jones, Caltrans
Ian McMillan, South Coast Air Quality Management District